Figure 1

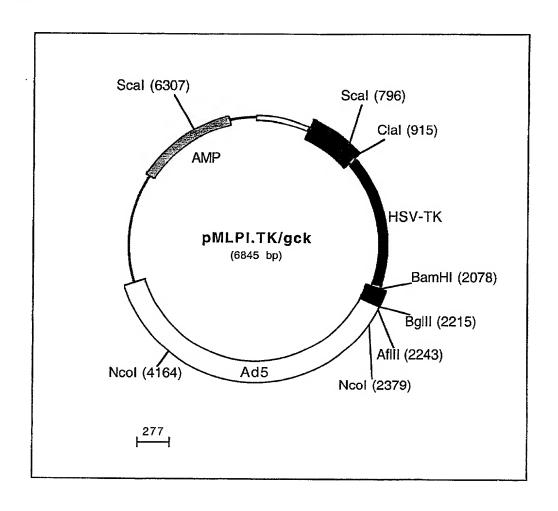


Figure 2

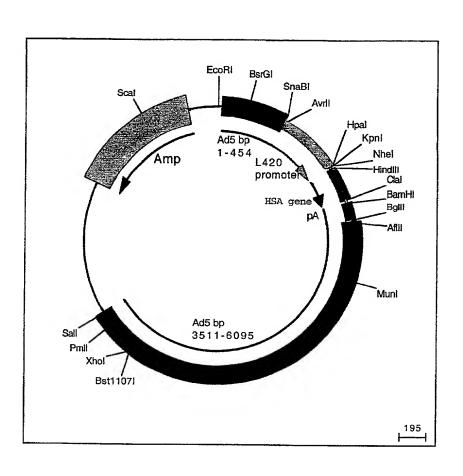


Figure 3

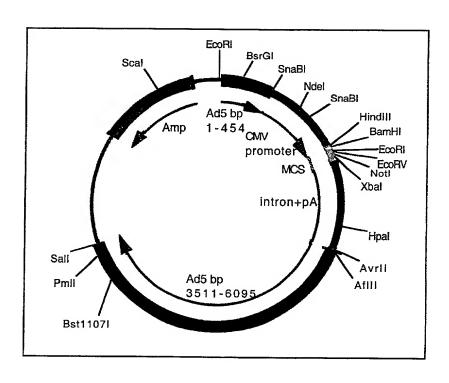


Figure 4

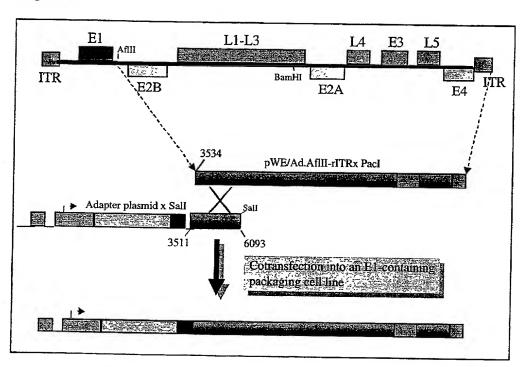


Figure 5

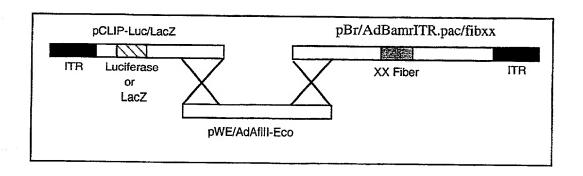


Figure 6

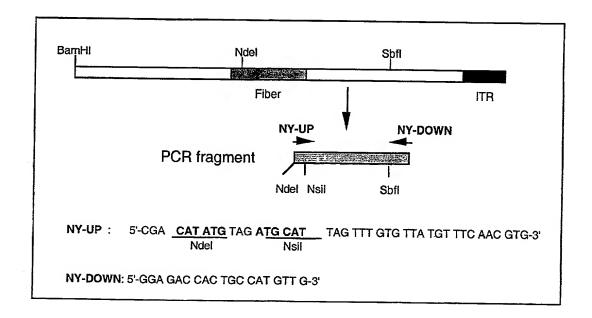


Figure 7:

fig 7 sq 1	1.1: Serotype 8 fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSNGFQ NFPPGVLSLKLADPITINNQNVSLKVGGGLTLQEETGKLTVNTEPPLHLTNNKLGI ALDAPFDVIDNKLTLLAGHGLSIITKETSTLPGLVNTLVYLTGKGIGTDLSNNGGN ICVRVGEGGGLSFNDNGDLVAFNKKEDKRTLWTTPDTSPNCRIDQDKDSKLTLV LTKCGSQILANVSLIVVAGRYKIINNNTNPALKGFTIKLLFDKNGVLMESSNLGKS YWNFRNQNSIMSTAYEKAIGFMPNLVAYPKPTTGSKKYARDIVYGNIYLGGKPH QPVTIKTTFNQETGCEYSITFDFSWAKTYVNVEFETTSFTFSYIAQE.	377
f:9 7 392	1.2: Serotype 9 fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ NFPPGVLSLKLADPIAIVNGNVSLKVGGGLTLQDGTGKLTVNADPPLQLTNNKL GIALDAPFDVIDNKLTLLAGHGLSIITKETSTLPGLINTLVVLTGKGIGTESTDNGG SVCVRVGEGGGLSFNNDGDLVAFNKKEDKRTLWTTPDTSPNCKIDQDKDSKLTL VLTKCGSQILANVSLIVVAGKYKIINNNTQPALKGFTIKLLFDENGVLMESSNLGK SYWNFRNENSIMSTAYEKAIGFMPNLVAYPKPTAGSKKYARDIVYGNIYLGGKP DQPVTIKTTFNQETGCEYSITFDFSWAKTYVNVEFETTSFTFSYIAQE.	377
fig 7 sq 3	1.3: Serotype 13 fiber protein XXXXXSAPTIFMLLQMKRARSSXDTFNPVYPYGYARNQNIXFXTPPFVXSDGF KNFPPGVLSLKLADPITIANGDVSLKVGGGLTLQEGSLTVDPKAPLQLANDKKLE LVYDDPFEVSTNKLSLKVGHGLKVLDDKSAGGLKDLIGKLVVLTGKGIGIENLQ NDDGSSRGVGINVRLGTDGGLSFDRKGELVAWNRKDDRRTLWTTPDPSPNCKA ETEKDSKLTLVLTKCGSQILATVSIIVLKGKYEFVKKETEPKSFDVKLLFDSKGVL LPTSNLSKEYWNYRSYDNNIGTPYENAVPFMPNLKAYPKPTKTASDKAENKISS AKNKIVSNFYFGGQAYQPGTIIKFNEEIDETCAYSITFNFGWGKVYDNPFPFDTTS FTXSYIAQE. (1 niel)	. ³ નુા
fig 7 5q 4	1.4: Serotype 14 fiber protein HPFINPGFISPNGFTQSPDGVLTLKCLTPLTTTGGSLQLKVGGGLTVDDTDGTLQE NIGATTPLVKTGHSIGLSLGAGLGTDENKLCTKLGEGLTFNSNNICIDDNINTLWT GVNPTEANCQMMDSSESNDCKLILTLVKTGALVTAFVYVIGVSNNFNMLTTYRN INFTAELFFDSAGNLLTSLSSLKTPLNHKSGQTWLLVPLLMLKVSCPAQLLILSIIL EKNKTTFTELVTTQLVITLLFPLTISVMLNQRAIRADTSYCIRITWSWNTGDAPEG QTSATTLVTS	2 <i>g</i> j
fig 759 5	1.5: Serotype 20 fiber protein IQNIPFLTPPFVSSDGLQNFPPGVLSLKLADPIAIVNGNVSLKVGGGITVEQDSGQL IANPKAPLQVANDKLELSYAYPFETSANKLSLKVGQGLKVLDEKDSGGLQNLLG KLVVLTGKGIGVEELKNPDNTNRGVGINVRLGKDGGLSFNKNGELVAWNKHND	345

TGTLWTTPDPSPNCKIEEVKDSKLTLVLTKCGSQILATMAFQVVKGTYENISKNT AKNSFSIKLLFDDNGKLLEGSSLDKDYWNFRSDDSIIPNQYDNAVPFMPNLKAYP KPSTVLPSTDKNSNGKNTIVSNLYLEGKAYQPVAVTITFNKEIGCTYSITFDFGWA KTYDVPIPFDSSSFT

1.6: Serotype 23 fiber protein
QNIPFLTPPFVSSDGFQNFPPGVLSLKLADPIAITNGDVSLKVGGGLTVEQDSGNL
KVNTKAPLQVAADKQLEIALADPFEVSKGRLGIKAGHGLKVIDNSISGLEGLVGT
LVVLTGHGIGTENLLNNDGSSRGVGINVRLGKDGGLSFDKKGDLVAWNKKYDT
RTLWTTPDPSPNCKVIEAKDSKLTLVLTKCGSQILANMSLLILKGTYEYISNAIAN
KSFTIKLLFNDKGVLMDGSSLDKDYWNYKSDDSVMSKAYENAVPFMPNLKAYP
NPTTSTTNPSTDKKSNGKNAIVSNVYLEGRAYQPVAITITFNKETGCTYSMTFDF
GWSKVYNDPIPFDTSSLT

1.7: Serotype 24 fiber protein
SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ
NFPPGVLSLKLADPIAITNGDVSLKVGGGLTVEKDSGNLKVNPKAPLQVTTDKQL
EIALAYPFEVSNGKLGIKAGHGLKVIDKIAGLEGLAGTLVVLTGKGIGTENLENS
DGSSRGVGINVRLAKDGGLSFDKKGDLVAWNKHDDRRTLWTTPDPSPNCTIDQ
ERDSKLTLVLTKCGSQILANVSLLVVKGKFSNINNNTNPTDKKITVKLLFNEKGV
LMDSSTLKKEYWNYRNDNSTVSQAYDNAVPFMPNIKAYPKPTTDTSAKPEDKK
SAAKRYIVSNVYIGGLPDKTVVITIKFNAETECAYSITFEFTWAKTFEDVQFDSSSF
TFSYIAOE.

1.8: Serotype 25 fiber protein
SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ
NFPPGVLSLKLADPITISNGDVSLKVGGGLTVEQDSGNLSVNPKAPLQVGTDKKL
ELALAPPFNVKDNKLDLLVGDGLKVIDKSISXLPGLLNYLVVLTGKGIGNEELKN
DDGSNKGVGLCVRIGEGGGLTFDDKGYLVAWNKKHDIRTLWTTLDPSPNCRID
VDKDSKLTLVLTKCGSQILANVSLLVVKGRFQNLNYKTNPNLPKTFTIKLLFDEN
GILKDSSNLDKNYWNYRNGNSILAEQYKNAVGFMPNLAAYPKSTTTQSKLYAR
NTIFGNIYLDSQAYNPVVIKITFNQEADSAYSITLNYSWGKDYENIPFDS

1.9: Serotype 27 fiber protein
IPFLTPPFVSSDGFKNFPPGVLSLKLADPITITNGDVSLKVGGGLVVEKESGKLSV
DPKTPLQVASDNKLELSYNAPFKVENDKLSLDVGHGLKVIGNEVSSLPGLINKLV
VLTGKGIGTEELKEQNSDKIIGVGINVRARGGLSFDNDGYLVAWNPKYDTRTLW
TTPDTSPNCKMLTKKDSKLTLTLTKCGSQILGNVSLLAVSGKYLNMTKDETGVKI
ILLFDRNGVLMQESSLDKEYWNYRNDNNVIGTPYENAVGFMPNLVAYPKPTSA
DAKNYSRSKIISNVYLKGLIYQPVIIIASFNQETTNGCVYSISFDFTCSKDYTGQQF
DVTSF

1.10: Serotype 28 fiber protein
SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ
NFPPGVLSLKLADPITIANGDVSLKLGGGLTVEKESGNLTVNPKAPLQVASGQLE
LAYYSPFDVKNNMLTLKAGHGLAVVTKDNTDLQPLMGTLVVLTGKGIGTGTSA

an F

Figure 7 cont.

HGGTIDVRIGKNGSLAFDKNGDLVAWDKENDRRTLWTTPDTSPNCKMSEVKDS KLTLILTKCGSQILGSVSLLAVKGEYQNMTASTNKNVKITLLFDANGVLLEGSSL DKEYWNFRNNDSTVSGKYENAVPFMPNITAYKPVNSKSYARSHIFGNVYIDAKP YNPVVIKISFNQETQNNCVYSISFDYTCSKEYTGMQFDVTSFTFSYIAQE.

1.11: Serotype 29 fiber protein

QNIPFLTPPFVSSDGFKNFPPGVLSLKLADPIAITNGDVSLKVGGGLTVEQDSGNL SVNPKAPLQVGTDKKLELALAPPFDVRDNKLAILVGDGLKVIDRSISDLPGLLNY LVVLTGKGIGNEELKNDDGSNKGVGLCVRIGEGGGLTFDDKGYLVAWNNKHDI RTLWTTLDPSPNCKIDIEKDSKLTLVLTKCGSQILANVSLII*VNGKFKILNNKTDPS LPKSFNIKLLFDQNGVLLENSNIEKQYLNFRSGDSILPEPYKNAIGFMPNLLAYAK ATTDQSKIYARNTIYGNIYLDNQPYNPVVIKITFNNEADSAYSITFNYSWTKDYD NIPFDSTSFTS

343

1.12: Serotype 30 fiber protein

SCSCPSAPTIFMLLQMKRARPSXDTFNPVYPYGYARNQNIPFXTPPFVXSDGFK
NFPPGVLSLKLADPIAITNGDVSLKVGGGLTVEQDSGNLSVNXKAPLQVGTDKK
'LELALAPPFDVRDNKLAILVGDGLKVIDRSISDLPGLLNYLVVXTGKGIGNEELK
NDDGSNKGVGLCVRIGEGGGLTXDDKGYLVAWNNKHDIRTLWTTLDPSPNCKI
DIEKDSKLTLVLTKCGSQILANVSLIIVNGKFKILNNKTDPSLPKSFNIKLLFDQNG
VLLENSNIEKQYLNFRSGDSILPEPYKNAIGFMPNLLAYAKATTDQSKIYARNTIY
GNIYLDNQPYNPVVIKITFNNEADSAYSITFNYSWTKDYDNIPFDSTSFIFSYIAQE

386

1.13: Serotype 32 fiber protein

SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ
NFPPGVLSLKLADPITIANGNVSLKVGGGLTLEQDSGKLIVNPKAPLQVANDKLE
LSYADPFETSANKLSLKVGHGLKVLDEKNAGGLKDLIGTLVVLTGKGIGVEELK
NADNTNRGVGINVRLGKDGGLSFDKKGDLVAWNKHDDRRTLWTTPDPSPNCTI
DEERDSKLTLVLTKCGSQILANVSLLVVKGKFSNINNNTNPTDKKITVKLLFNEK
GVLMDSSSLKKEYWNYRNDNSTVSQAYDNAVPFMPNIKAYPKPTTDTSAKPED
KKSAAKRYIVSNVYIGGLPDKTVVITIKLNAETESAYSMTFEFTWAKTFENLQFD
SSSFTFSYIAQE.

39

1.14: Serotype 33 fiber protein

SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFK
NFPPGVLSLKLADPITTNGDVSLKVGGGLTLQEGSLTVNPKAPLQLANDKKLEL
VYDDPFEVSTNKLSLKVGHGLKVLDDKSAGGLQDLIGKLVVLTGKGIGIENLQN
DDGSSRGVGINVRLGTDGGLSFDRKGELVAWNRKDDRRTLWTTPDPSPNCKAE
TEKDSKLTLVLTKCGSQILATVSIIVLKGKYEFVKKETEPKSFDVKLLFDSKGVLL
PTSNLSKEYWNYRSYDNNIGTPYENAVPFMPNLKAYPKPTKTASDKAENKISSA
KNKIVSNFYFGGQAYQPGTIIIKFNEEIDETCAYSITFNFGWGKVYDNPFPFDTTSF
TFSYIAQE. 391

1.15: Serotype 34 fiber protein

SSSFTFSYIAQE.

SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYEDESTSQHPFINPGFISPNGFTO SPDGVLTLKCLTPLTTTGGSLQLKVGGGLTVDDTDGTLQKNIRATTPITKNNHSV ELTIGNGLETQHNKLCAKLGNGLKFNNGDICIKDSINTLWTGINPPPNCQIVENTN 330 I'm 759 15 TNDGKLTLVLVKNGGLVNGYVSLVGVSDTVNQMFTQKTANIQLRLYFDSSGNL LTDESDLKIPLKNKSSTATSETVASSKAFMPSTTAYPFNTTTRDSENYIHGICYYM TSYDRSLFPLNISIMLNSRMISSNVAYAIQFEWNLNASESPEKQHMTLTTSPFFFSY-HEDDN. 1.16: Serotype 35 fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYEDESTSQHPFINPGFISPNGFTQ SPDGVLTLKCLTPLTTTGGSLQLKVGGGLTVDDTDGTLQENIRATAPITKNNHSV fig 7 sq 16 ELSIGNGLETQNNKLCAKLGNGLKFNNGDICIKDSINTLWTGINPPPNCQIVENTN 330⁰ TNDGKLTLVLVKNGGLVNGYVSLVGVSDTVNQMFTQKTANIQLRLYFDSSGNL LTEESDLKIPLKNKSSTATSETVASSKAFMPSTTAYPFNTTTRDSENYIHGICYYM TSYDRSLFPLNISIMLNSRMISSNVAYAIQFEWNLNASESPESNIMTLTTSPFFFSYI TEDDN. 1.17 Serotype 36 fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFK NFPPGVLSLKLADPIAIVNGDVSLKVGGGLTVEQDSGKLKVNPKIPLQVVNDQLE LATDKPFKIENNKLALDVGHGLKVIDKTISDLQGLVGKLVVLTGVGIGTETLKDK 1975917NDKVIGSAVNVRLGKDGGLDFNKKGDLVAWNRYDDRRTLWTTPDPSPNCKVS EAKDSKLTLVLTKCGSQILASVALLIVKGKYQTISESTIPKDQRNFSVKLMFDEKG KLLDKSSLDKEYWNFRSNDSVVGTAYDNAVPFMPNLKAYPKNTTTSSTNPDDKI SAGKKNIVSNVYLEGRVYQPVALTVKFNSENDCAYSITFDFVWSKTYESPVAFD SSSFTFSYIAQE. under 1.18 Serotype 37 fiber protein Vaxsluke SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFK NFPPGVLSLKLADPITITNGDVSLKVGGGLTLQDGSLTVNPKAPLQVNTDKKLEL 19 7 59 18 AYDNPFESSANKLSLKVGHGLKVLDEKSAAGLKDLIGKLVVLTGKGIGTENLEN ≾Yo TDGSSRGIGINVRAREGLTFDNDGYLVAWNPKYDLRTLWTTPDTSPNCTIAQDK DSKLTLVLTKCGSQILANVSLIVVAGKYHIINNKTNPKIKSFTIKLLFNKNGVLLD NSNLGKAYWNFRSGNSNVSTAYEKAIGFMPNLVAVSKPSNSKKYARDIVYGNIY LGGKPDQPGVIKTTFNQETGCEYSITFNFSWSKTYENVEFETTSFTFSYIAQE. 1.19 Serotype 38 fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFXTPPFVXSDGFQ NFPPGVLSLKLADPITIANGNVSLKVGGGLTLEQDSGKLIVNXKAPLQVANDKLE

LSYADPFETSANKLSLKVGHGLKVLDEKNAGGLKDLIGTLVVLTGKGIGVEELK

DEERDSKLTLVLTKCGSQILANVSLLVVKGKFSNINNNTNPTDKKITVKLLFNEK GVLMDSSSLKKEYWNYRNDNSTVSQAYDNAVPFMPNIKAYPKPTTDTSAKPED KKSAAKRYIVSNVYIGGLPDKTVVITIKLNAETESAYSMTFEFTWAKTFENLOFD

9 7 59 19 NADNTNRGVGINVRLGKDGGLSFDKKGDXVAWNKHDDRRTLWTTPDPSPNCTI

1.20 Serotype 39 fiber protein IRISPSSLPPLSPPMDSKTSPLGCYHSNWLTQSPSPMGMSHSRWEGGSPWQEGTG DLKVNAKSPLQVATNKQLEIALAKPFEEKDGKLALKIGHGLAVVDENHTHLQSL IGTLVILTGKGIGTGRAESGGTIDVRLGSGGGLSFDKDGNLVAWNKDDDRRTLW *33q* 197 59 20 TTPDPSPNCKIDQDKDSKLTFVLTKCGSQILANMSLLVVKGKFSMINNKVNGTD DYKKFTIKLLFDEKGVLLKDSSLDKEYWNYRSNNNNVGSAYEEAVGFMPSTTA YPKPPTPPTNPTTPLEKSQAKNKYVSNVYLGGQAGNPVATTVSFNKETGCTYSIT FDFAWNKTYENVQC. 1.21: Serotype 42 fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFK NFPPGVLSLKLANPIAITNGDVSLKVGGGLTLQDGTGKLTIDTKTPLQVANNKLE LAFDAPLYEKNGKLALKTGHGLAVLTKDIGIPELIGSLVILTGKGIGTGTVAGGGT 38a IDVRLGDDGGLSFDKKGDLVAWNKKNDRRTLWTTPDPSPNCRVSEDKDSKLTLI LTKCGSQILASFSLLVVXGTYTTVDKNTTNKQFSIKLLFDANGKLKSESNLSGYW NYRSDNSVVSTPYDNAVPFMPNTTAYPKUNSTTDPENKKSSAKKTIVGNVYLEG NAGQPVAVAISFNKETTADYSITFDFAWSKAYETPVPFDTSSMTFSYIAQE. 1.22: Serotype 43 fiber protein NIPXLTPPFVSSDGFKNFPPGVLSLKLADPITITNGDVSLKVGGGLTVEKESGNLT VNPKAPLQVAKGQLELAYDSPFDVKNNMLTLKAGHGLAVVTKDNTDLQPLMG 19 7 Sq 22 TLVVLTGKGIGTGTSAHGGTIDVRIGKNGSLAFDKDGDLVAWDKENDRRILWT 328 TPDTSPNCKMSEAKDSKLTLILTKCGSQILGSVSLLAVKGEYQNMTANTKKNVKI TLLFDANGVLLAGSSXXKEYWNFRSNDSTVSGNYENAVOFMPNITAYKPTNSKS YARSVIFGNVYIDAKPYNPVVIKISFNQETQNNCVYSISFDYTLSKDYPNMQFDV TLS 1.23: Serotype 44 fiber protein NIPFLTPPFVSSDGFQNFPPGVLSLKLADPITITNGNVSLKVGGGLTLQEGTGDLK VNAKSPLQVATNKQLEIALAKPFEEKDGKLALKIGHGLAVVDENHTHLQSLIGTL VILTGKGIGTGSAESGGTIDVRLGSGGGLSFDKDGNLVAWNKDDDRRTLWTTPD 341 PSPNCKIDQDKDSKLTFVLTKCGSQILANMSLLVVKGKFSMINNKVNGTDDYKK FTIKLLFDEKGVLLKDSSLDKEYWNYRSNNNNVGSAYEEAVGFMPSTTAYPKPP TPPTNPTTPLEKSQAKNKYVSNVYLGGQAGNPVATTVSFNKETGCTYSITFDFA WNKTYENVQFDSSF 1.24: Serotype 45 fiber protein NIPFLTPPFVSSDGFQNFPPGVLSLKLADPIAITNGDVSLKVGGGLTVEKDSGNLK VNPKAPLQVTTDKQLEIALAYPFEVSNGKLGIKAGHGLKVIDKIAGLEGLAGTLV VLTGKGIGTENLENSDGSSRGVGINVRLAKDGVLAFDKKGDLVAWNKHDDRRT 345 ${\tt LWTTPDPSPNCTIDQERDSKLTLVLTKCGSQILANVSLLVVKGKFSNINNNANPT}$ DKKITVKLLFNEKGVLMDSSTLKKEYWNYRNDNSTVSQAYDNAVPFMPNIKAY PKPSTDTSAKPEDKKSAAKRYIVSNVYIGGLPDKTVVITIKFNAETECAYSITFEFT

1.25: Serotype 46 fiber protein

WAKTFEDVOCDSSSFT

DTTKCISLCYVSTCLFFN

NIPFLTPPFVSSDGFKNFPPGVLSLKLADPIAIVNGDVSLKVGGGLTLQEGNLTVD AKAPLQVANDNKLELSYADPFEVKDTKLQLKVGHGLKVIDEKTSSGLQSLIGNL VVLTGKGIGTQELKDKDDETKNIGVGINVRIGKNESLAFDKDGNLVAWDNENDR *540* RTLWTTPDTSSKFVKISTEKDSKLTLVLTKCGSQILASVSLLAVAGSYLNMTAST 197 5925 QKSIKVSLMFDSKGLLMTTSSIDKGYWNYRNKNSVVGTAYENAIPFMPNLVAYP RPNTPDSKIYARSKIVGNVYLAGLAYQPIVITVSFNQEKDASCAYSITFEFAWNKD **YVGQFDTTSFT** 1.26 Serotype 47 fiber protein SCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFKNF PPGVLSLKLADPITITNGDVSLKVGGGLTLQEGTGNLTVNAKAPLQVADDKKLE LSYDNPFEVSANKLSLKVGHGLKVLDEKNSGGLQELIGKLVILTGKGIGVEELKN ADNTNRGVGINVRLGKDGGLSFDKKGELVAWNKHNDTRTLWTTPDPSPNCKIE 19 7 59 26 QDKDSKLTLVLTKCGSQILATMAFQVVKGTYENISKNTAKKSFSIKLLFDDNGKL 3Y9 LEGSSLDKDYWNFRNDDSIMPNQYDNAVPFMPNLKAYPNPKTSTVLPSTDKKSN GKNTIVSNLYLEGKAYQPVAVTITFNKETGCTYSITFEFGWAKTYDVPIPFDSSSF TFSYIAQE. 1.27: Serotype 48 fiber protein SDIPFLTPPFVSSDGFQNFPPGVLSLKLADPITITNGNVSLKVGGGLTLQEGTGDLK VNAKSPLQVATNKQLEIALAKPFEEKDGKLALKIGHELAVVDENLTHLQSLIGTL VILTGKGIGTGRAESGGTIDVRLGSGGGLSFDKDGNLVAWNKDDDRRTLWTTPD PSPNCKIDQDKDSKLTFVLTKCGSQILANMSLLVVKGKFSMINNKVNGTDDYKK 343 FTIKLLFDEKGVLLKDSSLDKEYWNYRSNNNNVGSAYEEAVGFMPSTTAYPKPP TPPTNPTTPLEKSQAKNKYVSNVYLGGQAGNPVATTVSFNKETGCTYSITFDFA WNKTYKMAFIPRFNF 1.28: Serotype 49 fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ NFPPGVLSLKLADPIAITNGNVSLKVGGGLTVEQDSGNLKVNPKAPLQVATDNQ LEISLADPFEVKNKKLSLKVGHGLKVIDENISTLQGLLGNLVVLTGMGIGTEELK KDDKIVGSAVNVRLGQDGGLTFDKKGDLVAWNKENDRRTLWTTPDPSPNCKVS 394 EEKDSKLTLVLTKCGSQILASVSLLVVKGKFANINNKTNPGEDYKXFSVKLLFDA NGKLLTGSSLDGNYWNYKNKDSVIGSPYENAVPFMPNSTAYPKIINNGTANPED KKSAAKKTIVTNVYLGGDAAKPVATTISFNKETESNCVYSITFDFAWNKTYKNV PFDSSSLTFSYIAGE. 1.29.: Serotype 51 Fiber protein SCSCPSAPTIFMLLQMKRARPSEDTFNPVYPYEDESTSQHPFINPGFISPNGFTQ SPDGVLTLNCLTPLTTTGGPLQLKVGGGLIVDDTDGTLQENIRVTAPITKNNHSV ELSIGNGLETQNNKLCAKLGNGLKFNNGDICIKDSINTLWTGIKPPPNCQIVENTD ${\tt TNDGKLTLVLVKNGGLVNGYVSLVGVSDTVNQMFTQKSATIQLRLYFDSSGNLL}$ TDESNLKIPLKNKSSTATSEAATSSKAFMPSTTAYPFNTTTRDSENYIHGICYYMT SYDRSLVPLNISIMLNSRTISSNVAYAIQFEWNLNAKESPESNIATLTTSPFFFSYIIE

Figure 8:

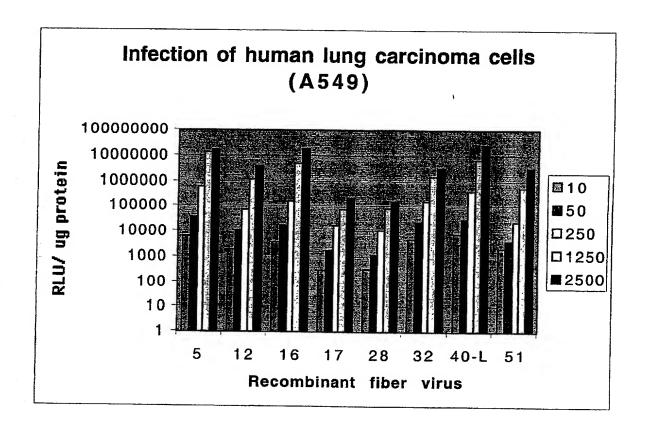


Figure 9

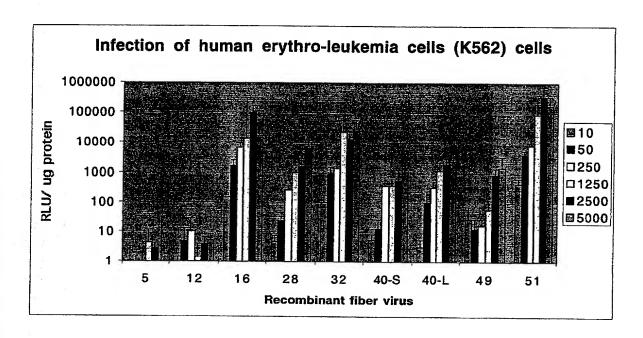


Figure 10

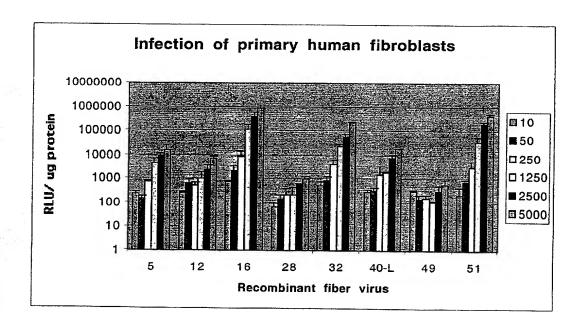


Figure 11

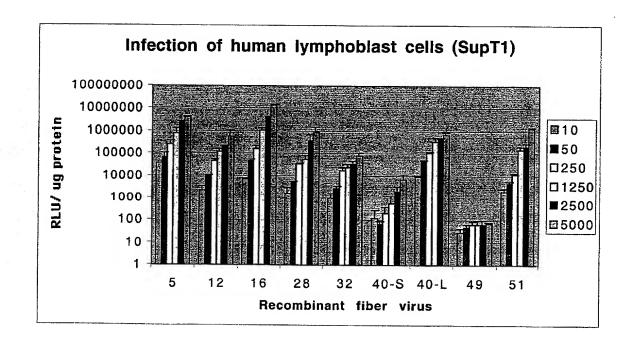


Figure 12

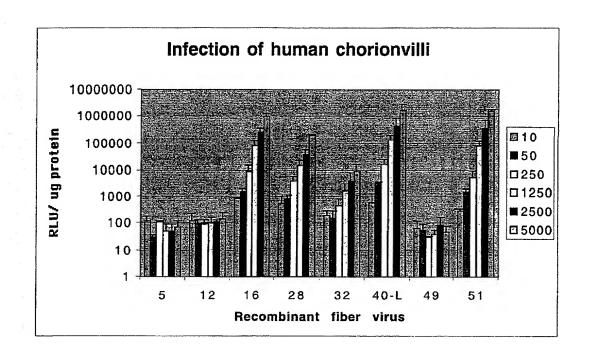


Figure 13

